Cyclades ACS 6000 Series
Advanced Console Servers

## A Next Generation Console Management Solution

Cyclades® ACS 6000 series of advanced console servers integrates cutting edge technologies, adaptive services and secure enterprise communications, offering IT professionals and network operations center (NOC) personnel the ability to perform secure, remote data center management and out-of-band management of IT assets from anywhere in the world. Using a hardened Linux® operating system, Cyclades ACS 6000 console servers provide optimal performance, security and reliability. Using DSView® 3 management software and integrated power, Cyclades ACS 6000 provides a complete out-of-band management solution.

High-Performance Design and Advanced Features

Cyclades ACS 6000 series of advanced console servers offers upgraded and advanced features that deliver scalable and high performance solutions for IT administrators. Cyclades ACS 6000 console servers feature a high speed processor platform with dual gigabit-Ethernet ports for redundancy, optional built-in modem and two 16- and 32-bit PC card options. In addition, Cyclades ACS 6000 features an internal temperature sensor for device level monitoring and configurable pin-outs for serial ports.

Cyclades ACS 6000 series also offers robust software features to meet the requirements of the most demanding data center management applications. Features include automated discovery tools to ease identification of servers, routers, switches or PBX connected to any serial port saving time at initial configuration and installation. To comply with existing data center network access policy, the Cyclades ACS 6000 provides customizable multiple access levels for secure management.

Cyclades ACS 6000 console servers provide a complete solution for secure remote control with advanced console server features such as enhanced security, data logging and event monitoring. In addition, ACS 6000 supports next generation network standards such as Internet Protocol version 6 (IPv6). Available in 16-, 32- and 48-port models that fit in 1U of rack space with single and dual AC and DC power option and with and without modem, Cyclades ACS 6000 console servers help maximize IT asset productivity while providing scalability and reducing operational costs.
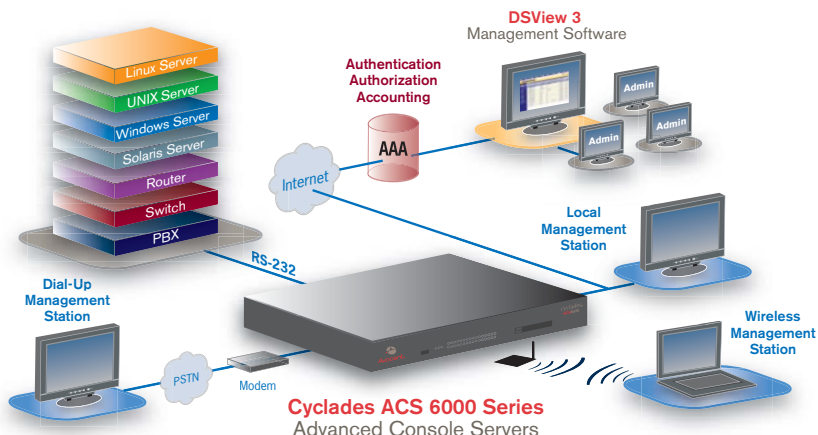
Applications

- Secure console and power management
- Server and network management
- Secure access to test and development lab environments
- Telco central office and remote facilities

Benefits

- Secure in-band and out-of-band network remote management
- Easy configuration and installation – Auto Discovery tool
- Eliminates adaptors for Cyclades and Cisco pin-out conversions
- Compliance with data center access and security policies – Customizable multiple access levels
- Integrated power management – Support for Cyclades PM and third party power support
- Compatible with next generation network standards – IPv6
- Centralized management using DSView 3 management software
- Strong dial-up and secure dial-back using optional built in modem and 16- and 32-bit PC cards options
- Access to remote and unreachable locations using Ethernet/Modem PC cards
- Automatic event tracking and notification of fault conditions
- Regulatory compliance and easy trouble shooting – online and offline data logging with time stamps

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Hardware Specifications

CPU: PPC440EPx @ 533 MHz (PowerPC with Security Acceleration Engine)

Memory: 128 MB NAND flash (embedded ICs on Motherboard)
256 MB DDR-2 memory (embedded ICs on Motherboard)

Interfaces: 2 Gigabit (10/100/1000BT) Ethernet interfaces on RJ45
1 RS-232 serial console port on RJ45
1 AUX RS232 port on RJ45 OR internal Modem V.92 port on RJ45 (RJ11 compatible)
16/32/48 RS232 ports on RJ45
1 USB 2.0 Host on Type A connector
2 PC Card / CardBus with ejector (dual Type II or single Type III)

PC Card Slots Supporting: Ethernet, fast Ethernet (fiber optic), wireless LAN (GSM, GPRS, CDMA, UMTS, Fiber and Memory Cards), V.92 and ISDN modems, compact flash, IDE drive

Power: Internal 100–240 VAC, 50/60 Hz Optional –48 VDC power supply
Optional dual entry, redundant AC and DC power supplies

Power Usage: Nominal voltage 120VAC:
Typical 0.17A, 20W
Maximum 0.25A, 30W

Nominal voltage 230VAC:
Typical 0.1A, 23W
Maximum 0.15A, 35W

Nominal voltage -48VDC (20% tolerance)
Typical 0.5A

Operating Temperature: ACS 6016, 6032, 6048
32°F to 122°F (0°C to 50°C)

Storage Temperature: –4°F to 158°F (–20°C to 70°C)

Humidity: 20% to 80% noncondensing

Dimensions: (WxDxH) ACS 6016, 6032, 6048 17.250 x 9.5 D x 1.75 in. (21 x 11 ¼ x 6 cm)

Weight: 6.6 lbs

Certifications:
Emissions and Immunity:
• FCC Class B
• CE Class A (EU)
• ICES-003 (Canada)
• VCCI (Japan)
• C-Tick and A-Tick (Australia)

Safety:
• UL (USA)
• cUL (Canada)
• EN-60950 (EU)
• CB
NEBS by Design**

In addition, the following certifications for specific models.
• GOSTR (Russia)*
• MIC (Korea)*

Only specific models are certified to the above certifications.
***NEBS level 3 compliant design*

Single Power Supply Models

AC Models	DC Models	Ports	Options
ACS6016SAC	ACS6016SDC	16	
ACS6016MSAC	ACS6016MSDC	16	Modem
ACS6032SAC	ACS6032SDC	32	
ACS6032MSAC	ACS6032MSDC	32	Modem
ACS6048SAC	ACS6048SDC	48	
ACS6048MSAC	ACS6048MSDC	48	Modem

Dual Power Supply Models

AC Models	DC Models	Ports	Options
ACS6016DAC	ACS6016DDC	16	
ACS6016MDAC	ACS6016MDDC	16	Modem
ACS6032DAC	ACS6032DDC	32	
ACS6032MDAC	ACS6032MDDC	32	Modem
ACS6048DAC	ACS6048DDC	48	
ACS6048MDAC	ACS6048MDDC	48	Modem

Features

Operating System
• Embedded Linux

Accessibility
• In-band (Ethernet) and out-of-band (dial-up modem) support
• Built in modem connectivity
• Allows for alternative access interfaces, such as modem (v.92 and ISDN), Ethernet, fast Ethernet (fiber optic) and wireless Ethernet (GSM, GPRS, UMTS and CDMA) throubh 16- and 32-bit PC cards

Availability
• Automatic Ethernet failover using second gigabit Ethernet port as the secondary port
• Dual power supply
• Internal modem support
• USB Port option allows for storage or to connect USB based PC cards

Security
• Preset security profiles – secure, moderate and open
• Custom security profiles
• X.509 SSH certificate support
• SSHv1 and SSHv2
• Local, RADIUS, TACACS+, LDAP/AD, NIS and Kerberos authentication
• Two-Factor Authentication (RSA SecurID®)
• One-Time Password (OTP) authentication
• Local backup user authentication support
• PAP/CHAP and Extensible Authentication Protocol (EAP) authentication (for dial-up lines)
• Group authorization:
  – TACACS+, RADIUS and LDAP
  – Port Access
  – Power Access
  – Appliance Priviledge
• IP packet and security filtering
• User access lists per port
• System event syslog
• IPSec with NAT traversal support
• IP forwarding support
• Secure factory defaults
• Strong Password Enforcement

Console Management
• Sun break-safe (Solaris Ready Certified)
• Break-over SSH support
• Offline data buffering – local and remote (NFS/Syslog/DSView 3 software)
• Level-based syslog filters
• Time stamp and rotations for data buffering
• Unlimited number of simultaneous sessions
• Simultaneous access on the same port (port sniffing) with ability to toggle
• Configurable event notification (e-mail, pager, SNMP trap)
• Customizable global time zone support
• Multiple and customizable user levels of access

Port Access
• Directly by server name or device name
• CLI Command
• Simultaneous Telnet and SSH access
• HTTP/HTTPS

System Management
• Configuration wizard in web for first time users
• Auto Discovery for automatic deployment
• Command line interface (CLI)
• Web Management Interface (HTTP/HTTPS)
• SNMP
• Internal temperature sensor

Cabling
• CAT5 compatible adapters for simpler cabling†
• Configurable Cyclades and Cisco pin-outs for serial ports

Upgrades
• Upgrades available on FTP site, no charge
• TFTP support for network boot

Additional Protocols Supported
• DHCP for dynamic IP address assignment
• IPv6 support for greater deployment flexibility
• PPP for dial-up
• NTP for time server synchronization
• RFC2217 support for remote serial port access